FIGURE 1

```
   1  gtcgacctgc  aggtcaacgg  atctgagagg  agagtagctt  cttgtagata  acagttggat
  61  tatataccat  gtcctgatcc  ccttcatcat  ccaggagagc  agaggtggtc  accctgatag
 121  cagcaagcct  gggggctgca  gcttggtggg  tagaggtact  caggggtaca  gatgtctcca
 181  aacctgtcct  gctgccttag  ggagcttcta  ataagttgat  ggatttggtt  aaaattaact
 241  tggctacttg  gcaggactgg  gtcagtgagg  accaacaaaa  agaagacatc  agattatacc
 301  ctgggggttt  gtatttcttg  tgtttctttc  tcttctttgt  actaaaatat  ttacccatga
 361  ctgggaaaga  gcaactggag  tctttgtagc  attatcttag  caaaaattta  caaagtttgg
 421  aaaacaatat  tgcccatatt  gtgtggtgtg  tcctgtgaca  ctcaggattc  aagtgttggc
 481  cgaagccact  aaatgtgaga  tgaagccatt  acaaggcagt  gtgcacatct  gtccacccaa
 541  gctggatgcc  aacatttcac  aaatagtgct  tgcgtgacac  aaatgcagtt  ccaggaggcc
 601  caaatgaaaa  tgtttgtact  gaaatttgtt  aaagcttccc  gacaaactag  atttatcagt
 661  aaggattgtt  ttctgcaagg  gggatgaaac  ttgtggggtg  agccatttgg  gctgaggagg
 721  agggaggttg  gagctgagaa  atgtggagac  aatttccctt  tagaaggact  gaatctccct
 781  gcctctctgg  ggtgcggcag  ccagcaggat  ccaatggtgt  atatgtctcc  ccagctcccc
 841  attcagtgat  atcatgtcag  tagcttgaaa  ttatccgtgg  tgggagtatt  atgtcatgga
 901  aattggcaaa  tggaaacttt  tattggagat  tcaattgtta  aacttttacc  agcacaacac
 961  tgccctgcct  tcagagtcaa  tgaccctatc  caagtttaat  ccatctgtcc  actgtctcca
1021  acacgatctt  tataaaacac  acctgacaac  attacccttt  tattcagttt  tttaaaagat
1081  aagtttccag  ctcatcgggg  tggctttaaa  ggccatttct  cctctggacc  tcacccaact
1141  tttcaaatca  cttttcctac  ccctacctct  aaatgctact  caaactccag  ccatcctgaa
1201  taataagact  tttgaaaagt  agattatggg  ctgggcacag  tggctcacac  ctgtaatccc
1261  agcactttgg  gaggccaaga  tgggtggatc  acctgaggtc  gggagttcga  gaccagcctg
1321  actaacatag  tgaaaccctg  tctctactaa  aaatacaaaa  ttagttgggg  gtggtggcac
1381  aagcctgtaa  tcccagctac  tcaggaggtt  gaggcagggg  aattgcttga  acctgggagg
1441  cggaggttgc  ggtgagccta  gattgctcca  ctgcactcca  gcctgggcaa  caagagcgaa
1501  actccatctc  aaaaaaataa  ataaataaat  aaagtagatt  acatcagata  cctctggcct
1561  aggttgttta  tgaccaactc  tcctgctgag  aataactaga  aaagctagac  aaaacatatt
1621  tccaaaagat  ctctttggag  gcatcagaga  atggccaagg  ctgtaaggaa  ctgcctgagc
1681  ccagagaggt  ggagcccagc  actggtgccc  tttactcctg  gggacatgtg  ctggtttcaa
1741  aaacttcagc  tgagcttttg  agcattcatg  gaacttggtg  ggggagatga  aatttgtacc
1801  ttaaatcctg  cctacaggga  gggtccctga  taatccccac  ccaatttgga  aatctgggtc
1861  agccttcaca  ggtactgaag  ccctcctctg  aatgatctca  agtcctgcta  gggtagaggt
1921  tacctgcttt  tgaaaggctc  ctggcctacc  tgtgcagcag  gagcaaaagt  gaaccatctc
1981  agggtacaga  taacaatcat  ccagagcctt  gaatgacctc  tactgtgctt  aatatatagt
2041  attcagcagt  cagtaaaaag  gatttaggca  catgcaagat  gacctgtgta  tcaggagaa
2101  ataggcaata  aattgagatc  cagcagggat  ttgaatcatg  gatttgaatc  aggggcagcc
2161  ttcgaaagaa  ctatggagaa  tatactcaga  tttaaaacat  aagattggaa  tttttggcag
2221  agaactaaca  actgtacaaa  aaaggaacca  aatggaaatc  ctagaactga  aagatgcaat
2281  taaccgatgt  tgagaaatag  ccaacatcta  ttgaacactt  cccatgtgga  cagctgtgct
2341  aaacacttta  caggcatcaa  cataagatgt  gtccccttac  agcagtgcag  tgtccctcct
2401  aagacatgga  cagcctggtt  tccctatctc  tctgcttcat  caaaacccct  ttacgtgggg
2461  cttagacact  cctgttgtct  ctagtgtcta  gtagcacagg  gctcagcaca  tggaagccac
2521  tagatacaat  ttgatgacca  ggacctccga  tgaaagccat  gggtgctgat  tgggaaggca
2581  ttgtctttta  tgtgctatgg  tcttaaagct  tcatccagga  agcagaactc  ggggggtgct
2641  gaggacccag  aaccgagaat  aagattagtc  agagatttcc  tgtgggcaga  aatcataagg
2701  acgccaactg  tttgggtgag  ataagacgaa  accaagagtg  gacttgtggc  cagaagcgtg
2761  aggaagaggg  agagagcttc  ccttgtcccc  tttcttcctc  tccctaagcc  acagtgattg
2821  acagcccccc  cgctttggag  tcagacagg  cttgagactg  gactgggaaa  ggagggtggg
2881  tcaggataca  gagcaggaag  gctgggagtg  cagggcagga  gcaagggget  ggggcattca
2941  ttgtgcctga  tctctcccac  tttacctggg  gtaaagaagc  atatgcaaaa  gccacggtgt
3001  gagtatttcc  caagtgccag  ggtcagggca  tgattcatca  cgtgcagcat  ttcattcaat
3061  ccttatagta  accgatgatg  tggcttctat  tattagctct  atcagataat  gaaactgaga
3121  ccaagacagg  ctctgcacat  tgtgtggggt  aatgacacag  ggggattcag  acctagactc
3181  cataactcct  gccccaggga  ccacccccac  cctcaccctg  tgcatgtcga  caaaggacag
3241  actgggccac  ttctcaggac  acagcgggga  aatgacacag  agcaggagg  ttccaggagc
3301  cccgagcgtc  ttttctccag  gagaatactc  tctgaattca  gactggggtc  agagaaacat
3361  ttacccagga  gccgcagtgt  gggtggggct  ttttacttga  aacgctgtct  gaaggcagtg
3421  gcaggatgaa  ctctccaccc  taccttggca  agccacttct  cttctgcaat  ctgtaaggac
```

FIGURE 1 (continued)

```
3481 attgttgaga gaattatggt cttccaattc cggagggttg aagaaagaca aataggagag
3541 aacctatcat agtcaggtgc tagctgcctt ctctttcaga gagtgtgaga ataaagtgat
3601 acacttgatt attagcaaat actttggaaa ttttaaacgc taatattcaa cacactctgg
3661 aagaggcaaa taagtagaca ggttcatata catcatctcc ttcagctagt cctcacaaaa
3721 acaaacaaat gaataaacaa aattcttctt tggccctcat aggaagacac tgtttcttga
3781 acgtgtttca aaaggatgg gtgactcact caaggtcaca ctgtttatga ggacagtaca
3841 ggaatacaga catgccattt tgcctgaaaa aatccatcac ccagggaggt gacacaattt
3901 tgcagaaatg ttctatttcc tctgaaggat acattcttta aacctttggg aaattcattc
3961 atagtcttcc tcctttgaag gattactctc tggacacaaa gtgtttgatt ctgatttgtt
4021 ggttggaaga tgtgttggtt gagagaaaga ttctgatttg ttggttgaaa atagactcat
4081 caagatcaac tgctgtagta gtaaatattt tgacattttg tctgtattcc tgtgctgccc
4141 tcacaagctg catcaccttg agtgagtcat tcatactttt ttgtttgttt ttgttttgga
4201 gatggagtct tactctgttg cctaggctgg agtgcggtgg cgtgatcttg gctcactgcg
4261 acctccatct cctgggttca agtgatcctc ctgcctcagc ctcccgagta gctgggatta
4321 caggcacatg ccaccatccc tgctaatttt tgcattttca gtagagacgg agtttcacca
4381 tgttggtcag gttggtcttg aactcctgac ctcaggtgat ccgcccacct cagcctcccc
4441 aagtgctggg attacaggtg tgagccaccg tgcccagccc agccatcatt tttgaaacac
4501 gtttgagaaa tagtgtcttc ctttgagggc caaggagaca ttttttttgt ttatttgttt
4561 gtttttgtga ggactagctg aaggggtga tgtatattaa cctgcctact tatttgcctc
4621 ttcccagagt gtgatgaata ttagggttta aagtttctga agcatttgtt aataaagccc
4681 ggggctggag gtcagaagac ctggatttct ctgcatactt ttgccatcag caagctgtgt
4741 gaccttggac agatccctt tttgtctaaa tctttctgag tcttcttgaa aacaatgcca
4801 ggttgggaca ggatgattgc caagctcccg tccagctcta aaacactgca acgtatgctt
4861 ctgcaccagc actgtccatc ctgtagatca tgcagaaatt ctcttcaact ttttcctacc
4921 cataaaatag gagcatgctt accttttttcc taatgttcca ggccccgggt ctagatattg
4981 taagtaagga agttaatgtg tatcagagcc cattatgggc cagaagttct cctcttcctt
5041 cctacacctg cttcctccct ccctccctcc ctctttccct tccttccttc catccatttg
5101 tgaagaagac atgatcaccc tcattctgag agtgaagaga cagaggctca actaatgaaa
5161 tgatttgttc aaggtcacac gggtggcaca aggcaagtgg cagaggttga atttagaccc
5221 attcctgtcc aaatgctgag tttatgtcat cgtcccgaga ccataacttt aaagatgtaa
5281 gatagtggga aaagagttga tttcaaagca cctctcagaa ggactcactt tacatcaggg
5341 gtcagcagac tcaggccaaa tccggtccat tccccgcttt tgcaaagaaa gttgtagtgg
5401 aacacagcta ggcttattga tttatggatt gccaacgtcc ttttgtgaaa cagacagctg
5461 agctgagtaa tcgtggcgca caaaacctaa aatatttact atctcgtcct ttacagaatg
5521 tttgccaatc tatggtccgg agtccaaggc tgtccatttt tcaaagaaca caaagtgaca
5581 tgagactgtc ccatgtgcag ggagccctat cattttatta tgaaaaaacg gcctttctgc
5641 tcaaatctgt tttttaaaaa gtcaacaaac agactctggg tacctgtcag gaacagtagg
5701 gagtttggtt tccattgtgc tcttcttccc aggaactcaa tgaaggggaa atagaaatct
5761 taattttggg gaaattgcac aggggaaaaa ggggagggaa tcagttacaa cactccattg
5821 cgacacttag tggggttgaa agtgacaaca gcaagggttt ctctttttgg aaatgcgagg
5881 agggtatttc cgcttctcgc agtggggcag ggtggcagac gcctagcttg ggtgagtgac
5941 tatttcttta taaaccacaa ctctgggccc gcaatggcag tccactgctt gctgcagtca
6001 cagaatggaa atctgcagag gcctccgcag tcacctaatc actctcctcc tcttcctgtt
6061 ccattcagag acgatctgcc gaccctctgg gagaaaatcc agcaagatgc aagccttcag
6121 gtaaggctac cccaaggagg agaaggtgag ggtggatcag ctggagactg gaaacatatc
6181 acagctgcca gggctgccag gccagagggc ctgagaactg ggtttgggct ggagaggatg
6241 tccattattc aagaaagagg ctgttacatg catgggcttc aggacttgtg tttcaaaata
6301 tcccagatgt ggatagtgcg accggagggc tgtcttactt tcccagagac tcaggaaccc
6361 agtgagtaat agatgcatgc caaggagtgg gactgcgatt caggcctagt tgaatgtgct
6421 gacagagaag cagagagggg caccagggc acagcccgaa ggcccagact gatatgggca
6481 aggcctgtct gtgctgacat gtcggagggt cccactctcc agggaccttg gtttccccgt
6541 ctgtgacatc tgtgacatga gagtcacgat aactccttgt gtgccttaca gggttgttgt
6601 gaaaattaaa tgcacagata atagcgtaac agtattccgt gcattgtaaa gagcctgaaa
6661 accattatga tttgaaaatg gaatcggctt tgtgagacca tcactattgt aaagatgtga
6721 tgctgataga aatgacagga ctgcttgtgc atgccctctg cagtgtgaca ttccagcagt
6781 gaaatcatgt tggggtgact tctcccccac tctgaccttt atgtttgtct gggccgaggc
6841 tgcaagtcgg gctctgtggg tgtatgagtg acaagtctct cccttccaga tatggggact
6901 gtctgcttcc ctaggttgcc tctccctgct ctgatcagct agaagctcca ggagatcctc
```

FIGURE 1 (continued)

```
 6961  ctggaggccc  cagcaggtga  tgtttatccc  tccagactga  ggctaaatct  agaaactagg
 7021  ataatcacaa  acaggccaat  gctgccatat  gcaaagcact  ttggtttgcc  tggccacccc
 7081  tcgtcgagca  tgtgggctct  tcagagcacc  tgatgaggtg  ggtacagtta  gccacacttc
 7141  acaggtgaag  aggtgaggca  caggtcccag  gtcaggctgg  ccggagctct  gtttattacg
 7201  tctcacagct  ttgagtcctg  ctctcaacca  gagaggccct  ttaccaagaa  gaaaggattg
 7261  ggacccagaa  tcaggtcact  ggctgaggta  gagaggaagc  cgggttgttc  ccaagggtag
 7321  ctgctcctgc  aggactctga  gcaggtcacc  agctaatgga  ggaaaggctc  tagggaaaga
 7381  cccttctggt  ctcagactca  gagcgagtta  gctgcaaggt  gttccgtctc  ttgaaacttc
 7441  tacctaggtg  ctatggtagc  cactagtctc  aggtggctat  ttaaatttat  acttaaatga
 7501  atgaaaatag  aagaaaattt  aaaatccaga  cccttggtca  cactatccac  atttaaagag
 7561  gtcaatagcc  acatgtggtt  agtggccacc  ctattgggca  gtgcagctac  agaacatttt
 7621  tgcatcccag  aaagttcttt  tggatgttgc  tgctctacag  catgctttgc  tgaaacagaa
 7681  gtgccttccc  tgggaatctc  agatgggaag  caagtaagga  ggggagtcaa  atgtgggctc
 7741  actgctcacc  agctgtgagg  gttgggcctg  cctcttaacc  attgtcagcc  tcagtcttct
 7801  catccatgca  tgccgtgggt  atactaaaat  actatacccc  tggaagagct  ggatgcaaat
 7861  ttgacaagtt  ctgggggaca  caggaaggtg  ccaagcacaa  ggctgggcac  atggtggctg
 7921  tgcactacag  ctgagtcctt  ttcctttcca  gaatctggga  tgttaaccag  aagaccttct
 7981  atctgaggaa  caaccaacta  gttgctggat  acttgcaagg  accaaatgtc  aatttagaag
 8041  gtgagtggtt  gccaggaaag  ccaatgtatc  tgggcatcac  gtcactttgc  ccgtctgtct
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 8161  ttgtattcaa  gtttgaagct  gggagggcct  ggctactgaa  gggcacatat  gagggtagcc
 8221  tgaagagggt  gtggagaggt  agagtctagg  tcagaggtca  gtgcctatag  gcaagtggtc
 8281  ccagggccac  agctgggaag  ggcaaatacc  agaaggcaag  gttgaccatt  cccttcctca
 8341  agtgcctatt  aaggctccat  gttcctatgt  tgttcaaacc  ctaactcaat  cccaaattaa
 8401  tccaccatgt  ataaggttga  gctatgtctc  ttattcctgg  acaccatact  cagccatatc
 8461  tggtccacac  attaacagct  ggatgacctt  gaagaagctt  cacccactct  gttcctcagc
 8521  tttcccttca  gtgggatgat  atcaactgga  caacaggatg  tgcgattctt  ttagttccag
 8581  ccttccagga  tgttttcact  cccctgtttg  ttgttgtagg  atggtattac  ctccaccttc
 8641  ccaccttccc  tatgccctgg  ttctgtctcc  tgtgcctcgc  tctgaaagtg  gatgagacct
 8701  acaattcctg  tcctggtagt  tctcctaatg  aacacactga  agcacgagga  agctgagatt
 8761  tttgttgcta  catgagagca  tggaggcctc  ttaggagag  aggaggttca  gagactccta
 8821  ggctcctggt  ggagccccac  tcatggcctt  gttcattttc  cctgcccctc  agcaacactc
 8881  ctattgacct  ggagcacagg  tatcctgggg  aaagtgaggg  aaatatggac  atcacatgga
 8941  acaacatcca  ggagactcag  gcctctagga  gtaactgggt  agtgtgcatc  ctggggaaag
 9001  tgagggaaat  atggacatca  catggaacaa  catccaggag  actcaggcct  ctaggagtaa
 9061  ctgggtagtg  tgcatcctgg  ggaaagtgag  ggaaatatgg  acatcacatg  gaacaacatc
 9121  caggagactc  aggcctctag  gagtaactgg  gtagtgtgca  tcctggggaa  agtgagggaa
 9181  atatggacat  cacatggaac  aacatccagg  agactcaggc  ctctaggagt  aactgggtag
 9241  tgtgcttggt  ttaatcttct  atttacctgc  agaccaggaa  gatgagacct  ctctgccctt
 9301  ctgacctcgg  gattttagtt  ttgtggggac  caggggagat  agaaaaatac  ccggggtctc
 9361  ttcattattg  ctgcttcctc  ttctattaac  ctgaccctcc  cctctgttct  tccccagaaa
 9421  agatagatgt  ggtacccatt  gagcctcatg  ctctgttctt  gggaatccat  ggagggaaga
 9481  tgtgcctgtc  ctgtgtcaag  tctggtgatg  agaccagact  ccagctggag  gtaaaaacat
 9541  gctttggatc  tcaaatcacc  ccaaaaccca  gtggcttgaa  acaaccaaaa  ttttttctta
 9601  tgattctgtg  ggttgaccag  gattagctgg  gtagttctgt  tccatgtggt  ggaacatgct
 9661  ggggtcactt  tggaagctgc  attcagcaga  gtgccaggct  tgcgctgggc  atccaaggtg
 9721  gtccctcatc  ctccaggctc  tctttccatg  tgatctctca  gtgtttaaga  gttagttgga
 9781  gcttccttac  agcatggcgg  ctgacttcca  aaagggatta  ttccaaaaag  agcctcaaca
 9841  tgcaggcgct  tattatgact  tctgcttgca  tcatcctatt  ggccaaagcc  agtcacgtgg
 9901  ctaagtctag  ccccctgtga  gaggagactg  cataagagtg  tgaacaccag  gagacacggt
 9961  cactgggggc  caccactgta  accatctacc  acaggacctg  aatctctgtg  tgctactccc
10021  ttgctcaagg  gcccccctac  ccacgcagac  ctgctgtctt  ctagcaaagc  ccatcctcag
10081  gacctttctc  ttccaatcct  tattgactca  aattgattag  ttggtgctcc  acccagagcc
10141  ctgtgctcct  ttatctcatg  taatgttaat  gggtttccca  gccctgggaa  aacatggctt
10201  tgtctcaggg  gcttgctgga  tgcaacctta  acctcaatgt  gagtggccat  actgtggcac
10261  tgtcccatcc  ctcaccaggg  acactgttct  ggagggtgac  tgcctgttct  gtgaggagtg
10321  gggatggcta  ggacattgca  tggaacacac  caccacccca  tcttctcaga  gctcaaaccc
10381  tgacagaaca  ccagctccac  aggccttggc  ttctgctgat  ggtgccgtgt  atttaccaga
```

FIGURE 1 (continued)

```
10441 cttagtggtc caaggccaga gtggcagatt tcccaaagtc aaggtgtgac agtgggacag
10501 cctctttgtg tctttgctgt cctaagaaac ctgggccagg ccaggcgcag tggctcacgc
10561 cttgtaatcc cagcactttg agaggccaag gtgggcagat cacgaggtca ggagtttgag
10621 accagcctgg ccaacattgg tgaaaccctg tctctattaa aaatagaaaa cattagacag
10681 gtgtggtggt gcatgcctgt aatcccagct actcaggagg ctgaggcagg agaatcgctt
10741 gaacccagga ggtggaggtt gcagtgagcc gagattgtgc cactgcactc cagcctaggc
10801 gacagagcaa gactccgtct cgggaaaatt aattaataaa taaataaacc taggtcccag
10861 agtcccacag aatggcagac aggagcacct gggggctttt agggtatggc atttcccctg
10921 tactaactct gggctgtcca gaggcgattt catggcgtgg agtggagagg gaggcagcac
10981 aggacttcct aggcctcagc tctcacctgc ccatcttttg atttccaggc agttaacatc
11041 actgacctga gcgagaacag aaagcaggac aagcgcttcg ccttcatccg ctcagacagt
11101 ggccccacca ccagttttga gtctgccgcc tgccccggtt ggttcctctg cacagcgatg
11161 gaagctgacc agcccgtcag cctcaccaat atgcctgacg aaggcgtcat ggtcaccaaa
11221 ttctacttcc aggaggacga gtagtactgc ccaggcctgc ctgttcccat tcttgcatgg
11281 caaggactgc agggactgcc agtccccctg ccccagggct cccggctatg ggggcactga
11341 ggaccagcca ttgaggggtg gaccctcaga aggcgtcaca acaacctggt cacaggactc
11401 tgcctcctct tcaactgacc agcctccatg ctgcctccag aatggtcttt ctaatgtgtg
11461 aatcagagca cagcagcccc tgcacaaagc ccttccatgt cgcctctgca ttcaggatca
11521 aaccccgacc acctgcccaa cctgctctcc tcttgccact gcctcttcct ccctcattcc
11581 accttcccat gccctggatc catcaggcca cttgatgacc cccaaccaag tggctcccac
11641 accctgtttt acaaaaaaga aaagaccagt ccatgaggga ggtttttaag ggtttgtgga
11701 aaatgaaaat taggatttca tgattttttt ttttcagtcc ccgtgaagga gagcccttca
11761 tttggagatt atgttctttc ggggagaggc tgaggactta aaatattcct gcatttgtga
11821 aatgatggtg aaagtaagtg gtagctttc ccttcttttt cttctttttt tgtgatgtcc
11881 caacttgtaa aaattaaaag ttatggtact atgttagccc cataattttt tttttccttt
11941 taaaacactt ccataatctg gactcctctg tccaggcact gctgcccagc ctccaagctc
12001 catctccact ccagattttt tacagctgcc tgcagtactt tacctcctat cagaagtttc
12061 tcagctccca aggctctgag caaatgtggc tcctggggt tctttcttcc tctgctgaag
12121 gaataaattg ctccttgaca ttgtagagct tctggcactt ggagacttgt atgaaagatg
12181 gctgtgcctc tgcctgtctc cccaccaggc tgggagctct gcagagcagg aaacatgact
12241 cgtatatgtc tcaggtccct gcaggccaa gcacctagcc tcgctcttgg caggtactca
12301 gcgaatgaat gctgtatatg ttgggtgcaa agttccctac ttcctgtgac ttcagctctg
12361 ttttacaata aaatcttgaa aatgcctata ttgttgacta tgtccttggc cttgacaggc
12421 tttgggtata gagtgctgag gaaactgaaa gaccaatgtg tyttycttac cccagaggct
12481 ggcgcctggc ctcttctctg agagttcttt tcttccttca gcctcactct ccctggataa
12541 catgagagca aatctctctg cgggg
```

FIGURE 2

```
  1 meicrglrsh litlllflfh seticrpsgr ksskmqafri wdvnqktfyl rnnqlvagyl
 61 qgpnvnleek idvvpiepha lflgihggkm clscvksgde trlqleavni tdlsenrkqd
121 krfafirsds gpttsfesaa cpgwflctam eadqpvsltn mpdegvmvtk fyfqede
```